



Mark Lopes, *Harvard University*
with Lester Echeverría, *AGEXPRONT*

“ Companies have no funds left for IT investment.”

— *IT consultant, Guatemala*

“ Entrepreneurship with information technologies in Guatemala will rise if private companies provide affordable e-commerce solutions for small and medium businesses.”

—*Guatemalan IT entrepreneur*

The Guatemalan government is pursuing an integrated approach to incorporate the use of ICTs in the national social and economic development agenda. Successful government initiatives have served as models and helped to build public confidence. In the private sector, recent liberalization of the telecommunications industry has spurred growth, investment options, and increased local interest. Challenges related to widespread poverty, a linguistically and ethnically divided population, a small private sector, and inadequate educational opportunities are hindering Guatemala's Networked Readiness. It is ranked sixty-eighth in the Networked Readiness Index.

Approximately 70 percent of the Guatemalan population lives in rural areas, yet 80 percent of the fixed-line connections are in Guatemala City.¹ Rural telephony development, therefore, is critical for truly national ICT development. Guatel (now called Telgua), the formerly state-owned telecommunications operator, was privatized in 1998. Since privatization, there have been improvements in service, coverage, and waiting time to obtain a new telephone line (Ranking in Effect of Telecommunications Competition: 47). However, urban and rural disparities remain marked, and this will continue to limit rural Internet adoption and the diffusion of services. Growth rates in wireless telephony between 1998 and 2000 reached more than 600 percent, but wireless penetration still remains low relative to the total population.² In 2000, there were approximately fifteen ISPs with an estimated 65,000 Internet users (Ranking in Public Access to the Internet: 59).

The government of Guatemala, together with the World Bank and UNDP, recently developed an integrated financial system website to improve administration and fiscal transparency (Ranking in Online Government Services: 54). The system reduces payment time by recording financial transactions in an online database.

The next step will be to take this idea to municipalities and local governments. The project won the World Bank Excellency award in 1999 and has served as a strong model that has helped to build confidence in the value of public-sector investments in ICTs.

Although many Guatemalan businesses have begun using the Internet to acquire new clients, increase sales, and diversify markets, they have done so with limited success. E-commerce remains new to the business community (Ranking in e-Commerce micro-index: 65); exporters as well as local sellers have become more involved in recent years, but trade red tape, combined with the overall lack of diffusion of services, continues to limit opportunities. Even though most businesses have yet to become convinced of the Internet's value as a marketing tool, most agree that having an online presence adds an image of prestige (Ranking in Business Websites: 62).

The Non Traditional Exporters Association and the Guatemalan Chamber of Commerce are promoting the use of the Internet for business, social, and educational development. They have collaborated to form business centers that offer Internet access and videoconferencing for business training and consultation. These groups hope to stimulate local businesses and increase access to foreign markets.

Many of the challenges that hinder broader economic development in Guatemala also hinder adoption of ICTs. Key issues are providing telephony access to the large rural population and developing a legal and regulatory framework conducive to Networked Readiness. Foreign investment remains restricted as a result of a lack of user-friendly foreign investment laws.

Key Facts

Population	11,400,000
Rural population (% of total population) 1999	60.52 %
GDP per capita (PPP)	US\$3,784
Global Competitiveness Index Ranking, 2001–2002	66
UNDP Human Development Index Ranking, 2001 (adjusted to GTR sample)	70
Main telephone lines per 100 inhabitants	5.70
Telephone faults per 100 main telephone lines	45.20
Internet hosts per 10,000 inhabitants	4.92
Personal computers per 100 inhabitants	0.97
Piracy rate	77.00 %
Percent of PCs connected to Internet	1.61 %
Internet users per host	36.68
Internet users per 100 inhabitants	0.59
Cell phone subscribers per 100 inhabitants	3.04
Average monthly cost for 20 hours of Internet access	US\$20.00

RANK

Networked Readiness Index **68**

Network Use component index **62**

Enabling Factors component index **66**

■ Network Access **58**

Information Infrastructure 53

Hardware, Software, and Support 63

■ Network Policy **64**

Business and Economic Environment 68

ICT Policy 60

■ Networked Society **66**

Networked Learning 70

ICT Opportunities 56

Social Capital 73

■ Networked Economy **67**

e-Commerce 65

e-Government 65

General Infrastructure 70